

NSF/ISSI PARTNERSHIP FOR SOLAR MAXIMUM 2000

Program Solicitation

NSF 99-173

DIRECTORATE FOR GEOSCIENCES
DIVISION OF ATMOSPHERIC SCIENCES

OPTIONAL LETTER OF INTENT: JANUARY 4, 2000
DEADLINE DATE: MARCH 1, 2000



NATIONAL SCIENCE FOUNDATION



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SUMMARY OF PROGRAM REQUIREMENTS

GENERAL INFORMATION

Program Name: NSF/ISSI PARTNERSHIP FOR SOLAR MAXIMUM 2000

Short Description/Synopsis of Program:

The International Space Science Institute (ISSI) was set up as a foundation under Swiss law, with headquarters in Bern, on 31 January 1995. ISSI is funded through the European Space Agency (ESA), the Swiss Confederation, and the Canton of Bern. This initiative provides an opportunity to request NSF funding of up to \$100,000 to organize a focused, international, interdisciplinary team approach to a specific research problem. Proposals submitted to this initiative must identify a research problem, and identify by name up to three "Convenors" from the United States to organize a project at ISSI leading to the publication of an edited volume. Upon selection of the US convenors, and in consultation with them, ISSI will select an appropriate number of European convenors. The convenors will meet at ISSI to define the project structure in detail and to nominate a group of 30-40 participants, chosen in matching numbers from the US and from Europe. The study project itself will then develop in the form of one or more workshops at ISSI, possibly with intervening splinter meetings of subgroups at ISSI or elsewhere. The project must be completed with the publication of a volume in the Space Sciences Series of ISSI, which will also appear as a regular volume of *Space Science Reviews*.

Cognizant Program Officer(s):

Dr. Paul Evenson, Division of Atmospheric Sciences, GEO/NSF, pevenso@nsf.gov, +1-703-306-1530

Dr. Rudolf von Steiger, International Space Science Institute, vsteiger@issi.unibe.ch, +41-31-631-4890

Applicable Catalog of Federal Domestic Assistance (CFDA) No.: 47.050 — Geosciences

ELIGIBILITY

- ◆ Limitation on the categories of organizations that are eligible to submit proposals: **Individual investigators or small groups from universities and non-profit organizations may submit proposals.**
- ◆ PI eligibility limitations: **Only one proposal may be submitted by a Principal Investigator**
- ◆ Limitation on the number of proposals that may be submitted by an organization: **None**

AWARD INFORMATION

- ◆ Type of award anticipated: **Standard Grant**
- ◆ Number of awards anticipated in FY 00: **1 award**
- ◆ Amount of funds available: **Approximately \$100,000 will be available for this initiative in FY 2000**
- ◆ Anticipated date of award: **June 2000**

PROPOSAL PREPARATION & SUBMISSION INSTRUCTIONS

♦ Proposal Preparation Instructions

- Letter of Intent requirements: **January 4, 2000 (Optional but strongly encouraged)**
- Preproposal requirements: **None**
- Proposal preparation instructions: **Standard NSF Grant Proposal Guide instructions**
- Supplemental proposal preparation instructions: **None**
- Deviations from standard (GPG) proposal preparation instructions: **None**

♦ Budgetary Information

- Cost sharing/matching requirements: **None**
- Indirect cost (F&A) limitations: **None**
- Other budgetary limitations:

Award amount up to \$100,000

♦ FastLane Requirements

- FastLane proposal preparation requirements: **FastLane use optional**
- FastLane point of contact:

Phyllis Hurley or Ruth Joel, Rm 775, ph 703-306-1520, email phurley@nsf.gov or rjoel@nsf.gov

♦ Deadline/Target Dates

- Full Proposal Deadline **5:00 PM, ET, March 1, 2000 (paper)**
 5:00 PM local time, March 1, 2000 (FastLane)

PROPOSAL REVIEW INFORMATION

- ♦ Merit Review Criteria: **Standard National Science Board approved criteria**

AWARD ADMINISTRATION INFORMATION

- ♦ Grant Award Conditions: **GC-1 or FDP III**
- ♦ Special grant conditions anticipated: **None anticipated**
- ♦ Special reporting requirements anticipated: **None**

INTRODUCTION

The Directorate for Geosciences (Division of Atmospheric Sciences, Solar Terrestrial Research Program) of the National Science Foundation (NSF) and the International Space Science Institute (ISSI) announce a joint initiative to sponsor a study project, resulting in the publication of an edited volume, on a topic relating to the upcoming solar maximum. The goal of the initiative is to enhance solar terrestrial research and education by coordinating efforts and combining resources of the two agencies.

PROGRAM DESCRIPTION

The International Space Science Institute (ISSI) was set up as a foundation under Swiss law, with headquarters in Bern, on 31 January 1995. ISSI is funded through the European Space Agency (ESA), the Swiss Confederation, and the Canton of Bern. This initiative provides an opportunity to request NSF funding of up to \$100,000 to organize a focused, international, interdisciplinary team approach to a specific research problem related to the upcoming solar maximum. Proposals submitted to this initiative must identify a research problem, and identify by name up to three "Convenors" from the United States to organize a project at ISSI leading to the publication of an edited volume.

Upon selection of the US convenors, and in consultation with them, ISSI will select an appropriate number of European convenors. The convenors will meet at ISSI to define the project structure in detail and to nominate a group of 30-40 participants, chosen in matching numbers from the US and from Europe. The study project itself will then develop in the form of one or more workshops at ISSI, possibly with intervening splinter meetings of subgroups at ISSI or elsewhere.

The project must be completed with the publication of a volume in the Space Sciences Series of ISSI (which also appears as regular volumes of Space Science Reviews). The volume should:

- Assess the status of the field
- Provide an integrated overview of the current knowledge in the form of a topical review
- Present original research of the convenors and the participants in the project
- Identify open questions and directions for future research.

Proposals should also discuss effective ways in which education is integrated within the research program. After organization of the workshop is complete, funding for specific, additional student observers may be requested from NSF as a supplement to the initial award.

Some of the general research areas that may be considered are:

- Solar Magnetism
- Solar Flares
- Coronal Mass Ejections
- Space Weather
- Solar Irradiance

The above list is intended to be illustrative; the specific requirements are that the topic be:

- Distinct from past and planned activities at ISSI
- Specifically related to solar maximum
- Within the generally accepted scope of work at ISSI
- Within the generally accepted scope of the Solar Terrestrial Research Program at NSF

Funding for this initiative is derived from existing resources of the Solar Terrestrial Research Program at NSF complemented by resources at ISSI. It is the intention that NSF and ISSI should share the expenses of the workshop approximately equally. This will allow a much greater participation by participants from the US than has been possible in other ISSI activities. NSF expects to make one award, not to exceed \$100,000. Funding will be awarded in FY 2000, but the awardee will have up to three years to complete the proposed effort.

ELIGIBILITY

Individual investigators or small groups from universities and non-profit organizations may submit proposals. Due to the limited availability of funds, prospective applicants are strongly urged to discuss prospective proposals with the Program Director for Solar Terrestrial Research:

Dr. Paul Evenson
Division of Atmospheric Sciences, GEO/NSF
pevenso@nsf.gov
+1-703-306-1530

Information on the program at ISSI may be found on the web site www.issi.unibe.ch. This site includes a complete listing of past and planned volumes in the ISSI series. Specific questions regarding the ISSI program may be discussed with the responsible Director:

Dr. Rudolf von Steiger
International Space Science Institute
vsteiger@issi.unibe.ch
+41-31-631-4890

AWARD INFORMATION

One award will be given as a standard grant for a duration of up to three years. Depending upon the nature of the research activity, the award will be for up to \$100,000. This is a pilot program. Further joint efforts may be undertaken after an assessment of the success of the initial selection.

PROPOSAL PREPARATION & SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions.

Proposers are encouraged to send a brief letter of intent to submit a proposal by electronic mail to pevenso@nsf.gov no later than January 4, 2000. The letter should clearly state that it is in response to this solicitation, and should contain the name and electronic mail addresses of the PI and any Co-PI's, their institutions, and a few sentences description of what would be proposed. Please send the letter in clear text, with no attachments. The purpose of the letter of intent is to allow us to provide guidance to prospective proposers on the appropriateness of the subject matter for the planned submission well prior to the proposal deadline.

Proposals submitted in response to this program announcement should be prepared and submitted in accordance with the general guidelines contained in the *Grant Proposal Guide* (GPG), NSF 00-2. The complete text of the GPG (including electronic forms) is available electronically on the NSF Web site at: <http://www.nsf.gov/cgi-bin/getpub?nsf002>. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone 301.947.2722 or by e-mail from pubs@nsf.gov.

Proposers are reminded to identify the program announcement number (NSF 99-173) in the program announcement/solicitation block on the NSF Form 1207, "*Cover Sheet for Proposal to the National Science Foundation*." Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

Proposals should be structured as follows:

- Scientific importance and timeliness of the proposed topic.
- Relationship of the topic to Solar Maximum
- Background of the proposed US Convenors, and the role of each in the project.
- Project management and structure, including a draft timeline of activities.
- Names of possible European Convenors.

Potential US delegates must not be identified in the proposal, nor contacted in any way in advance of review of the proposal, so that unbiased peer review of the scientific objectives may take place. European Convenors will be selected by ISSI after discussion with the US Convenors. Participants will be invited by ISSI after the organizational meeting of all Convenors.

B. Budgetary Information

The proposal budget may include salary support and any other costs associated with the participation of the Convenors in planning the workshop, attending the workshop, doing supporting research, and editing the volume of proceedings. The convenors must (minimally) attend one, three-day organizational meeting in Bern, Switzerland.

The budget must provide for payment to ISSI of a \$1500 registration fee for each US participant to be invited, for each workshop session having a typical duration of five days (Monday-Friday). This fee includes all local expenses in Bern for meals, lodging, and facilities. Participants at ISSI workshops are typically expected to provide their own transportation to and from Bern.

The budget must provide for payment of \$5000 to Kluwer Publications, for expenses relating to the publication of the proceedings.

Proposing institutions are encouraged to waive or reduce overhead on that part of the award used to pay registration and publication fees.

C. Proposal Due Dates.

For paper submission of proposals, the paper copies of the proposal **MUST** be received by 5:00 PM, ET, March 1, 2000. Copies of the proposal must be made and submitted to NSF according to the normal procedures for paper proposals identified in the GPG.

For electronic submission of proposals, the proposal **MUST** be submitted by 5:00 PM, local time, March 1, 2000. Copies of the signed proposal cover sheet must be submitted in accordance with the instructions identified below.

Submission of Signed Cover Sheets. For proposals submitted electronically via FastLane, the signed proposal Cover Sheet (NSF Form 1207) should be forwarded to the following address and received by NSF by March 8, 2000:

National Science Foundation
DIS-FastLane Cover Sheet
4201 Wilson Blvd.
Arlington, VA 22230

A proposal may not be processed until the complete proposal (including signed Cover Sheet) has been received by NSF.

D. FastLane Requirements.

Proposers are encouraged to prepare and submit proposals using the NSF FastLane system. Detailed instructions for proposal preparation and submission via FastLane are available at <https://www.fastlane.nsf.gov/a1/newstan.htm>

Submission of Signed Cover Sheets. For proposals submitted electronically, the signed paper copy of the proposal Cover Sheet (NSF Form 1207) should be forwarded to NSF within five working days following proposal submission in accordance with FastLane proposal preparation and submission instructions referenced above.

Paper Submission of Proposals. For paper submission of proposals, proposers should follow submission instructions contained in the NSF Grant Proposal Guide (GPG), (NSF 00-2) Section I.F.

PROPOSAL REVIEW INFORMATION

A. Merit Review Criteria.

Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program officers charged with the oversight of the review process. NSF invites the proposer to suggest, at the time of submission, the names of appropriate or inappropriate reviewers. Care is taken to ensure that reviewers have no conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority serving institutions, adjacent disciplines to that principally addressed in the proposal, etc.

Proposals will be reviewed against the following general merit review criteria established by the National Science Board. Following each criterion are potential considerations that the reviewer may employ in the evaluation. These are suggestions and not all will apply to any given proposal. Each reviewer will be asked to address only those that are relevant to the proposal and for which he/she is qualified to make judgments.

What is the intellectual merit of the proposed activity?

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

What are the broader impacts of the proposed activity?

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

PIs should address the following elements in their proposal to provide reviewers with the information necessary to respond fully to both NSF merit review criteria. NSF staff will give these factors careful consideration in making funding decisions.

Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learner perspectives.

Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- are essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

B. Review Protocol and Associated Customer Service Standard

All proposals are carefully reviewed by at least three persons outside NSF who are experts in the particular field represented by the proposal. Proposals submitted in response to this announcement will be reviewed by mail review, panel review, or some combination of mail and panel review. Proposal review will be managed jointly by Paul Evenson from NSF and Rudolf von Steiger from ISSI.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. A program officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation. In most cases, proposers will be contacted by the program officer after his or her recommendation to award or decline funding has been approved by the ATM division director. This informal notification is not a guarantee of an eventual award. NSF will be able to tell applicants whether their proposals have been declined or recommended for funding within six months for 95 percent of proposals in this category. The time interval begins on the proposal deadline or target date or from the date of receipt, if deadlines or target dates are not used by the program. The interval ends when the division director accepts the program officer's recommendation.

In all cases, after final programmatic approval has been obtained, award recommendations are then forwarded to the Division of Grants and Agreements for review of business, financial and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with an NSF program officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants Officer does so at its own risk.

AWARD ADMINISTRATION INFORMATION

A. Notification of the Award.

Notification of the award is made *to the submitting organization* by a Grants Officer in the Division of Grants and Agreements (DGA). Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator.

B. Grant Award Conditions.

An NSF grant consists of: (1) the award letter, which includes any special provisions applicable to the grant and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable grant conditions, such as Grant General Conditions (NSF GC-1)* or Federal Demonstration Partnership Phase III (FDP) Terms and Conditions* and (5) any NSF brochure, program guide, announcement or other NSF issuance that may be incorporated by reference in the award letter. Electronic mail notification is the preferred way to transmit NSF grants to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

* These documents may be accessed electronically on NSF's Web site at: <<http://www.nsf.gov/>>. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone 301.947.2722 or by e-mail from pubs@nsf.gov.

More comprehensive information on NSF Award Conditions is contained in the NSF *Grant Policy Manual* (GPM) Chapter II, (NSF 95-26) available electronically on the NSF Web site. The GPM also is available in paper copy by subscription from the Superintendent of Documents, Government Printing Office, Washington, DC 20402. The GPM may be ordered through the GPO Web site at: <<http://www.gpo.gov/>>. The telephone number at GPO for subscription information is (202) 512-1800.

C. Reporting Requirements.

For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after expiration of a grant, the PI also is required to submit a final project report. Approximately 30 days before expiration, NSF will send a notice to remind the PI of the requirement to file the final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

NSF has implemented a new electronic project reporting system, available through FastLane, which permits electronic submission and updating of project reports, including information on: project participants (individual and organizational); activities and findings; publications; and, other specific products and contributions. Reports will continue to be required annually and after the expiration of the grant, but PIs will not need to re-enter information previously provided, either with the proposal or in earlier updates using the electronic system.

Effective October 1, 1999, PIs are required to use the new reporting system for submission of annual and final project reports.

D. New Awardee Information.

If the submitting organization has never received an NSF award, it is recommended that the organization's appropriate administrative officials become familiar with the policies and procedures in the NSF *Grant Policy Manual* which are applicable to most NSF awards. The "Prospective New Awardee Guide" (NSF 99-78) includes information on: Administration and Management Information; Accounting System Requirements and Auditing Information; and Payments to Organizations with Awards. This information will assist an organization in preparing documents that NSF requires to conduct administrative and financial reviews of an organization. The guide also serves as a means of highlighting the accountability requirements associated with Federal awards. This document is available electronically on NSF's Web site at: <<http://www.nsf.gov/cgi-bin/getpub?nsf9978>>.

CONTACTS FOR ADDITIONAL INFORMATION

Questions concerning this joint program should be addressed, preferably via email, to the following NSF or ISSI staff:

Dr. Paul Evenson
Division of Atmospheric Sciences, GEO/NSF
pevenso@nsf.gov
703-306-1530

Dr. Rudolf von Steiger
International Space Science Institute
vsteiger@issi.unibe.ch
+41-31-631-4890

OTHER PROGRAMS OF INTEREST

The NSF Guide to Programs is a compilation of funding for research and education in science, mathematics, and engineering. General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter. Many NSF programs offer announcements concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices listed in Appendix A of the GPG. Any changes in NSF's fiscal year programs occurring after press time for the Guide to Programs will be announced in the NSF Bulletin, available monthly (except July and August), and in individual program announcements. The Bulletin is available electronically via the NSF Web Site at <http://www.nsf.gov>. The direct URL for recent issues of the Bulletin is <http://www.nsf.gov/od/lpa/news/publicat/bulletin/bulletin.htm>. Subscribers can also sign up for NSF's Custom News Service to find out what funding opportunities are available.

ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Grantees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

NSF welcomes proposals from all qualified scientists, engineers and educators. The Foundation strongly encourages women, minorities, and persons with disabilities to compete fully in its programs. In accordance with federal statutes, regulations, and NSF policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NSF (unless otherwise specified in the eligibility requirements for a particular program).

Facilitation Awards for Scientists and Engineers with Disabilities (FASSED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the program announcement or contact the program coordinator at (703) 306-1636.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation regarding NSF programs, employment, or general information. TDD may be accessed at (703) 306-0090 or through FIRS on 1-800-877-8339.

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the review process; to applicant institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne H. Plimpton, Reports Clearance Officer; Division of Administrative Services; National Science Foundation; Arlington, VA 22230.

YEAR 2000 REMINDER

In accordance with Important Notice No. 120 dated June 27, 1997, Subject: Year 2000 Computer Problem, NSF awardees are reminded of their responsibility to take appropriate actions to ensure that the NSF activity being supported is not adversely affected by the Year 2000 problem. Potentially affected items include: computer systems, databases, and equipment. The National Science Foundation should be notified if an awardee concludes that the Year 2000 will have a significant impact on its ability to carry out an NSF funded activity. Information concerning Year 2000 activities can be found on the NSF web site at <http://www.nsf.gov/oirm/y2k/start.htm>.

The National Science Foundation is committed to making all of the information we publish easy to understand. If you have a suggestion about how to improve the clarity of this document or other NSF-published materials, please contact us at plainlanguage@nsf.gov.

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